

SECTION 402 – SEEDING

1. GENERAL

Work under this section consists of the furnishing and the application of fertilizer, grass seed, and mulching material at locations shown on the plans or where designated by the Engineer. This work shall also include preparation of the ground for the seedbed.

2. FERTILIZERS

The fertilizer shall be a commercial carrier of available nutrients and shall comply with the State of Kansas Fertilizer laws. It shall be of the ureaformaldehyde type, uniform in composition, dry, free-flowing and shall be delivered to the site in standard bags, showing weight, analysis and name of processor. The fertilizer shall be stored and kept dry at all times.

The fertilizer analysis shall be 10% Nitrogen; 20% Phosphorus; and 10% Potassium. It shall be applied at a rate of 400 pounds per acre.

3. GRASS SEED

All grass seed shall comply with the seed laws and noxious weed laws of the State of Kansas. Seed, which has become wet, moldy, or otherwise damaged in storage or transit will not be acceptable. The vendor or an approved seed-testing laboratory to conform to the following requirements shall certify Grass seed:

Common Name	Germination	Purity	Germination
	Period		
Fescue (K-31)	14 days	95%	85%

The above grass seed shall be drilled evenly over the entire seed area at the rate of 400 pounds per acre.

4. MULCH

Materials acceptable for mulching shall include wheat straw, oat straw, prairie hay, or brome grass hay. Mulching material shall be free of field bindweed, Johnson grass, or other weeds declared noxious by the Kansas State Board of Agriculture.

The mulching material shall be placed over the designated areas after seeding and fertilizing has been completed. The mulching material shall be spread uniformly to the approximate depths shown below:

Type of Material	Approximate Depth (Loose Measure)	Approximate Tons per Acre
Prairie Hay	1.5"	1.75 - 2.25
Brome grass	1.5"	1.75 - 2.25
Straw	3.0"	1.50 - 2.00

All mulching material shall be punched into the soil so that it is partially covered. The punching operation shall be performed longitudinally with a mulching puncher. It may be necessary to use weights or hydraulic pressure to insure that the mulch is punched into the soil.

The Contractor shall arrange his work so that the mulch can be placed and punched immediately after each slope area is seeded. Mulching operations shall not lag behind seeding operations more than 24 hours during clear weather. When rain is threatening, the Contractor shall make every effort to mulch areas the same day as seeded.

5. PREPARATION OF THE SEEDBED

The entire area to be seeded shall be prepared prior to seeding. The soil preparation shall be accomplished by disking, harrowing and firming. The minimum depth of soil preparation shall be two (2) inches. Several disking and harrowings over some areas may be required to provide a satisfactory seedbed.

Existing small weeds and grass that can be disked shall be cut by the disk and partially incorporated into the soil.

6. SEED AND FERTILIZER APPLICATION

The grass seed and fertilizer shall be uniformly distributed with acceptable drills and other equipment (such as an Easy Flow).

When a standard drill with a fertilizer attachment is used, both seed and fertilizer may be applied during one (1) operation.

All drills shall be fully adjustable so that they will deliver the seed and fertilizer at the rates specified in this section. Drills shall be adjustable so that the seeds can be planted and covered not to exceed one-half (1/2) inch depth. Under some conditions it may be necessary to remove the downspouts on the drills to prevent clogging with wet soil.

The seedbed shall be firmed with a cultipacker after drilling and fertilizer operations have been completed.

7. TIME OF SEEDING

The two general seeding seasons shall be Spring Seeding Season, February 15 to April 20, and the Fall Seeding Season, August 15 to September 30.

8. INSPECTION

Upon completion of the seeding operations, a final check of the total quantities of materials used in the seeding, fertilizing and mulching operations will be made against the total area seeded. If the minimum rate of applications has not been met or if inspection after the germination period indicates that areas have missed due to the failure to operate equipment properly or other causes, the Contractor will be required to re-seed and/or apply fertilizer on these areas, designated by the Engineer, at no additional cost to the Owner.